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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/826,232

04/16/2004

Carol A. Tosaya

D-03020A

9638

7590

04/22/2011

John w. Sliwa  
24871 Olive Tree Lane  
Los Altos Hills, CA 94024

EXAMINER

SCOTT, BRANDY C

ART UNIT

PAPER NUMBER

3767

MAIL DATE

DELIVERY MODE

04/22/2011

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/826,232	TOSAYA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	BRANDY C. SCOTT	3767	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 February 2011.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 89-102 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 89-101 is/are rejected.
- 7) ☒ Claim(s) 102 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                      |                                                                   |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____                                                          | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 89-101 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 2002/0177843 to Anderson in view of 5,713,831 to Olsson.

As to claims 89 and 100, Anderson discloses a minimally invasive (§0003) apparatus comprising: at least one distal acoustic emitter capable of directing acoustic energy toward a target and recovering a desired degree of actuation; an exciter to power and control the emitters acoustic operation; a proximally grippable scope, catheter, handle, guidewire, sheath or a gripping robot distally supporting the emitter and allowing a practitioner to control acoustic coupling of and use of the emitter on the target; wherein by actuating is specifically meant that the implant or body member has (a) adjacent, joined or mating portions which normally at least one of swing, hinge, pivot, distend, or flex relative to each other at least once or (b) mating parts which are plugged, connected, threaded or passed into or through each other at least once (pivot; §0028). Anderson discloses cauterization of tissue which is a process for removing an undesired growth, or minimizing other potential medical harmful possibilities such as infections, when antibiotics are not available (§0028). Anderson does not disclose the emitter including a deformable or soft standoff, the standoff at least one of (i) preventing

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or inhibiting direct emitter-target contact, (ii) allowing for gentle stoppage or suppression of the targets actuation for deposit removal, and (iii) allowing for passage of the emitter into or through the actuator without damaging the actuator. Olsson discloses a device that transforms supplied energy into ultrasound signals and transmits the ultrasound signals into a body sufficiently to influence the dissolution of undesirable growth (abstract) where the emitter (1) is situated behind a deformable or soft standoff (patient's skin, 3) preventing or inhibiting direct emitter-target contact (In Figure 3, the target is a thrombus (7) located in the coronary artery (8), but the emitter is not in direct contact with the artery (8)). At the time of invention, it would have been obvious to one of ordinary skill in the art to modify the emitter of Anderson with the emitter to Olsson to noninvasively provide treatment as fast as possible (Column 1, lines 35-38).

As to claim 90, Anderson discloses the apparatus wherein the actuation comprises pivoting (¶0028).

As to claim 91, Anderson in view of Olsson discloses the apparatus wherein the implant or member is cardiac (Figure 3).

As to claims 92, Anderson in view of Olsson discloses the apparatus wherein a chemical agent is employed at any time to aid in the acoustic removal of the deposit material in any manner (Column 1, lines 57-60).

As to claim 93, Anderson in view of Olsson discloses the apparatus wherein the acoustic power employed is sufficient to cause at least one of blood streaming, blood or deposit cavitation, deposit erosion or deposit-heating useful in said removal (Column 3, lines 6-13).

As to claims 94-98, Anderson in view of Olsson discloses the apparatus wherein the acoustic power is being delivered continuously, wherein acoustic signatures are employed to guide the removal task (Column 3, lines 34-42).

As to claim 99, Anderson in view of Olsson discloses the apparatus wherein a cavitation enhancing agent (heat) is employed (Column 1, lines 57-60).

As to claim 101, Anderson discloses the apparatus wherein the actuation occurs between two or more portions of one or more natural body parts (§10100).

***Allowable Subject Matter***

3. Claim 102 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

4. Applicant's arguments filed 2/14/2011 have been fully considered but they are not persuasive. Applicant argues that "Applicants claim an apparatus for recovering the normal full motions or actuations of bodily parts." However, the claim reads "invasive apparatus for removal, breakdown or erosion of undesirable deposits present on, at or in actuating bodily implants or actuating bodily-members or organs of a patient." The robotic members of Anderson could be considered "actuating bodily implants" since they are medical instruments inserted into the body for a period of time. Applicant should consider amending to further limit the claim to read exclusively on body parts. Applicant argues that Anderson teaches contact with the tissue but Anderson in view of Olsen teach preventing or inhibiting direct emitter-target contact with the tissue that is

actually being treated. Furthermore, the emitter can include the skin between the device and the treatment site since it is included in the transmission of radiation.

### ***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRANDY C. SCOTT whose telephone number is (571)270-7410. The examiner can normally be reached on Monday-Friday, 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Sirmons can be reached on (571)272-4965. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/B. C. S./  
Examiner, Art Unit 3767  
/KEVIN C. SIRMONS/

Supervisory Patent Examiner, Art Unit 3767